

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A high-frequency heating device (1) which comprises, comprising:

a magnetron (2) magnetron generating microwave energy,

a filament circuit circuit (3), and

an inverter comprising a wave multiplexer coupled to a resonant circuit which ensures that the magnetron (2) magnetron is powered by high-frequency rectified voltage via the energy obtained from the network a network coupled to the resonant circuit and, which incorporates a wave multiplexer (9) whereby the wherein voltage obtained from the high-frequency current coming from the resonant circuit (8) the resonant circuit is multiplied by being raised and rectified and

characterized by wherein an inverter (4) the inverter which includes a low-pass filter (10) filter placed between the wave multiplexer (9) multiplexer and the ground, providing that low-frequency noise is eliminated from the current without decreasing the voltage and that the current applied to the magnetron (2) magnetron is smoothed.

Claim 2 (new): The high-frequency heating device according to claim 1 wherein the current applied to magnetron has a sinusoidal form.

Claim 3 (new): The high-frequency heating device according to claim 1 wherein the current applied to magnetron has been changed from a square-wave form to a sinusoidal form.